IN THE CLAIMS:

Please cancel claims 4 and 5, inclusive. Please note that these claims 4 and 5 have now been included within the amended claim 1.

Please amend claims 1, 6, 7-11, and 14-20, inclusive.

Claims 2, 3, 12 and 13, remain "as-is".

Examiner had indicated that claims 6-9 would be allowable (and also claim 5 would be allowable) if re-written to include limitations of the base. This has now been done.

1. (Currently Amended) In a computer system including at least two server nodes, each of which can execute clustered server software, a method for providing data to restore clustering, said method comprising the steps of:

(a) comparing a current configuration data to a previous configuration data in an initialization phase[[;]] which includes the steps of:

(a1) gathering previously stored data for a first one of said server nodes, and setting a flag to start with an installation phase if said previously stored data does not exist;

(a2) gathering current state data for said first server node;

(a3) comparing said current state data to said previously stored data, and setting said flag to start with said installation phase if discrepancies exist;

(a4) gathering companion node data for said first server node;

(a5) determining if said flag has been seen to start with an installation form, said installation form to permit a user to specify data to use in installing clustering software, and if so;

(a6) displaying said installation form;

(b)   comparing said current configuration data to a standard configuration data in an installation phase[[;]] which includes the steps of:

(b1) allowing a user to change said current state data;

(b2) comparing said current state data with established guidelines for clustering and reporting discrepancies to said user;

(b3) determining if a second one of said server nodes is known by a first server node, and if so;

(b4) specifying said second server node as a companion node;

(b5) comparing configuration data of first server node with configuration data of said second server node;

(b6) allowing said user to make corrections to said configuration data of first server node and said configuration data of second server node if discrepancies exist;

(b7) saving said configuration data of first server node and said configuration data of second server node;

(b8) displaying a diagnostics form;

(c)   comparing   a   set   of   operations   to   a   standard
clustering functionality in a diagnostics phase;

(d)   displaying a set of results in a results phase.

2. (Original) The method as in Claim 1 wherein said data to restore clustering is provided when clustering services fail.

3. (Original) The method as in Claim 1 wherein said installation phase further includes the step of installing clustered software on said computer system.

4.   (Cancelled).

5.   (Cancelled).

6. (Currently Amended) The method as in Claim 1 wherein said diagnostics phase includes the steps of:

(a) allowing a [[said]] user to specify a companion node;

(b) allowing a [[said]] user to specify a diagnostics test level;

(c) allowing a [[said]] user to specify a set of test categories;

(d) allowing a [[said]] user to specify a method of interaction between said computer system and said user;

(e) sequentially running a set of tests;

(f) running a set of tests for environmental rules if selected;

(g) running a set of tests for cluster communication if selected;

(h) running a set of tests for shared resources if selected;

(i) displaying a results form.

7. (Currently Amended) The method as in Claim 6 wherein said step (f) of running said set of tests for environmental rules includes the steps of:

> (f1) [[(a)]] testing [[a]] saved configuration data between [[said]] a first server node and said configuration data of said first server node;

> (f2) [[(b)]] testing [[a]] saved configuration data between said first server node and said configuration data of a second server Node. [[;]]

8. (Currently Amended) The method as in Claim 6 wherein said step (g) of running said set of tests for cluster communication includes the steps of:

> (g1) [[(a)]] testing an ability for a [[said]] first server node to communicate with a [[said]] second server node via all network connections marked as private;

> (g2) [[(b)]] testing an ability for a [[said]] first server node to communicate with a [[said]] second server node via all network connections marked as public;

> (g3) [[(c)]] testing an ability for a [[said]] first server node to communicate with a [[said]] second server node via all network connections marked as both private and public;

(g4) [[(d)]] testing an ability for a [[said]] first server node to communicate with a controller node;

(g5) [[(e)]] testing an ability for a [[said]] first server node to execute commands on said second server node. [[;]]

9. (Currently Amended) The method as in Claim 6 wherein said step (h) of running said set of tests for shared resources includes the steps of:

(h1) [[(a)]] testing an ability for a [[said]] first server node to utilize a shared storage device for arbitrating operation of said computer system;

(h2) [[(b)]] testing an ability to reset and reserve a SCSI bus for said shared storage device. [[;]]

10. (Currently Amended) The method as in Claim 1 wherein said results phase includes the steps of:

(d1) [[(a)]] allowing a [[said]] user to view all diagnostics;

(d2) [[(b)]] allowing a [[said]] user to view diagnostics producing errors;

(d3) [[(c)]] allowing a [[said]] user to view diagnostics producing errors or warnings;

(d4) [[(d)]] allowing a [[said]] user to traverse a collection of diagnostics;

(d5) [[(e)]] allowing a [[said]] user to save said collection of diagnostics to a log file.

11. (Currently Amended) <u>Computer Readable Media</u> ~~A storage medium~~ encoded with machine-readable computer program code utilizing a method for providing data to restore clustering <u>between a first server node and a second server node</u>, wherein, when a computer <u>system</u> executes the computer program code, the computer performs the steps of:

      (a) comparing a current configuration data to [[a]] previous configuration data in an initialization phase;

      (b) comparing said current configuration data to a standard configuration data in an installation phase;

      (c) comparing a set of operations to a standard clustering functionality in a diagnostics phase;

      (d) displaying a set of results in a results phase.

12. (Original) The method as in Claim 11 wherein said data to restore clustering is provided when clustering services fail.

13. (Original) The method as in Claim 11 wherein said installation phase further includes the step of installing clustered software on said computer system.

14. (Currently Amended) The method as in Claim 11 wherein said initialization phase includes the steps of:

   (a)   gathering previously stored data for a first one of said server nodes, and setting a flag to start with said installation phase if said previously stored data does not exist;

   (b)   gathering current state data for said first server node[[;]] to specify the state of clustering;

   (c)   comparing said current state data to said previously stored data, and setting said flag to start with said installation phase if discrepancies exist;

   (d)   gathering companion node data for [[said]] a first server node;

   (e)   determining if said flag has been [[said]] set to start with said installation form, which will permit a user to specify data to use in installing clustering software, and if so;

   (f)   displaying an installation form.

15. (Currently Amended) The method as in Claim 11 wherein said installation phase includes the steps of:

(a) allowing a user to <u>access and</u> change [[said]] current state data;

(b) comparing said current state data with established guidelines for clustering and reporting discrepancies to said user;

(c) determining if a second one of said server nodes is known by said first server node, and if so;

(d) specifying said second server node as a companion node;

(e) comparing configuration data of first server node with configuration data of said second server node;

(f) allowing <u>a</u> [[said]] user to make corrections to said configuration data of first server node and said configuration data of second server node if discrepancies exist;

(g) saving said configuration data of <u>said</u> first server node and said configuration data of <u>said</u> second server node;

(h) displaying a diagnostics form.

16. (Currently Amended) The method as in Claim 11 wherein said diagnostics phase includes the steps of:

> (a) allowing a [[said]] user to specify a companion node;
>
> (b) allowing a [[said]] user to specify a diagnostics test level;
>
> (c) allowing a [[said]] user to specify a set of test categories;
>
> (d) allowing a [[said]] user to specify a method of interaction between said computer system and a [[said]] user;
>
> (e) sequentially running a set of tests;
>
> (f) running a set of tests for environmental rules if selected;
>
> (g) running a set of tests for cluster communication if selected;
>
> (h) running a set of tests for shared resources if selected;
>
> (i) displaying a results form.

17. (Currently Amended) The method as in Claim 16 wherein said step _(f)_ of running said set of tests for environmental rules includes the steps of:

> _(f1)_ [[(a)]] testing a saved configuration between said first server node and said configuration data of _said_ first server node;

> _(f2)_ [[(b)]] testing a saved configuration between said first server node and said configuration data of _said_ second server node_._ [[;]]

18. (Currently Amended) The method as in Claim 16 wherein said step _(g)_ of running said set of tests for cluster communication includes the steps of:

> _(g1)_ [[(a)]] testing an ability for said first server node to communicate with said second server node via all network connections marked as private;

> _(g2)_ [[(b)]] testing an ability for said first server node to communicate with said second server node via all network connections marked as public;

> _(g3)_ [[(c)]] testing an ability for said first server node to communicate with said second server node via all network connections marked as both private and public;

(g4) [[(d)]] testing an ability for said first server node to communicate with a controller node;

(g5) [[(e)]] testing an ability for said first server node to execute commands on said second server node. [[;]]

19. (Currently Amended) The method as in Claim 16 wherein said step (h) of running said set of tests for shared resources includes the steps of:

(h1) [[(a)]] testing for an ability for said first server node to utilize a shared storage device for arbitrating operation of said computer system;

(h2) [[(b)]] testing for an ability to reset and reserve a SCSI bus for said shared storage device. [[;]]

20. (Currently Amended) The method as in Claim 11 wherein step (d) of displaying said results phase includes the steps of:

(d1) [[(a)]] allowing [[said]] user to view all diagnostics;

(d2) [[(b)]] allowing a [[said]] user to view diagnostics producing errors;

(d3) [[(c)]] allowing a [[said]] user to view diagnostics producing errors or warnings;

(d4) [[(d)]] allowing a [[said]] user to traverse a collection of diagnostics;

(d5) [[(e)]] allowing a [[said]] user to save said collection of diagnostics to a log file.